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AUTHOR Farmer, Helen
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ABSTRACT

The report describes a University of Illinois project which designed and field-tested computer-assisted adult counseling centers. These centers offered counseling for persons seeking to make career changes, to continue their education, or to leave the home and enter the labor market. Computers provided a comprehensive data bank of information on occupational and educational opportunities, while counselors performed the essential roles of identifying obstacles to educational or career goals and of planning ways to overcome these obstacles. The theoretical basis for the design of the centers is adapted from Tiedeman and O'Hara, wherein services are built around the developmental tasks relevant to the educational and career needs of adults. A six-step method to guide the counselor and client in self-study planning is outlined. The four major components of the information system--educational information, occupational information, self-information, and guidance information--are described in the report. (NJ)

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Inquiry Project:[1]

Computer-Assisted Counseling Centers For Adults

Helen Farmer[2]

University of Illinois, Champaign-Urbana

Running Title: Inquiry Counseling Centers for Adults

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Abstract

INQUIRY centers for adults offer counseling for persons seeking to make career changes, to continue their education or to leave the comforts of home and re-enter the world of work (i.e., women) and are unaware of most of the available opportunities. Computers are used to assist in the counseling offered by providing a comprehensive data bank of information on educational and occupational opportunities. Counselors perform the essential role of providing adults assistance in identifying obstacles to obtaining their educational or career goals and in planning ways to overcome these obstacles. INQUIRY center counselors use a Socratic, guided inquiry method of counseling which relies on the adult client to carry out plans and take responsibility for his actions.

Computer-Assisted Counseling Centers for Adults

Joan is a woman working in a local cigar store as a salesgirl. She is earning $450.00 a month and very dissatisfied with her life and her work. Recently she broke up with her boyfriend, after six years of going steady. One day she was telling her troubles to a friend who suggested she come to the INQUIRY Center to see if they could help her find more interesting work.

Joan provided the following information about herself during her initial talk with the counselor, at the center, as they discussed her work and educational history.

Joan is 32 years old and has an AA degree preparing her to be a X-ray Technician. She was not accepted into the lab portion of this training because of some personal disagreement with the Dean. However, she found that she really hated this type of work. She particularly hated being neat and systematic (i.e. filing x-ray folders). Joan doesn't want to go back to school full time but she would like to get a better paying job and she is willing to take courses at night toward that goal. Last semester she took a course in medical terminology to prepare herself for work as a medical secretary. She says she hates typing and is very poor at it. On the other hand she found she was talented in learning medical terminology and that it gave her pleasure to learn difficult new words. Joan appeared to be still smarting from the rejection of the X-ray Technician Program Dean and wanted to learn more about current opportunities in this field as well as possible sites to complete her training when she arrived at the INQUIRY Center.

Joan is an example of a career changer who needed help in identifying educational and career opportunities which met her personal values and interests. She is representative of only one type of adult who might benefit from community based educational and career counseling centers for adults.

Counseling Needs of Adult Learners

Many adults seek to continue their education to make career changes or to leave the comforts of home and re-enter the world of work (i.e., women) and are unaware of most of the available opportunities. This is especially true for adults with lower levels of formal education or occupational prestige who have not been traditionally represented in higher education resident instruction programs. Educational institutions and employers usually provide information about their courses or jobs, but it is difficult for the adult to locate relevant information about opportunities and then to select those that are most appropriate for them. In order to increase access to higher education for adults who want to study part-time, and to increase awareness of career training opportunities and leisure time activities, there is an urgent need at the community and regional level for a central clearinghouse for information about educational and career opportunities. With this type of information, the adult will be better able to make decisions about increased competence and/or career development, and proceed to contact the appropriate institutions, agencies, and employers.

Research studies have found that about twenty-five percent of the adults in the U.S. participated in some form of continuing education in the years 1972-73 but that about fifty percent said they would have participated if they had known where to sign up for specific courses and training opportunities (Carp, 1973). Another thirty-three percent of those adults studied said they did not know about the existence of continuing education programs for adults. A first need then, of adults, is for specific information about educational opportunities and for more information (i.e., at locations easily found by adults) (Carp, 1973; Knox, 1968).

A second need for adults in America is to obtain counseling help in finding a satisfying life plan which utilizes their talents in an optimal way. Many adults, especially disadvantaged adults and women who have raised their families are seeking to improve their employment status or reenter the labor market (Koontz, 1971). Manpower training programs have offered training in work related skills for disadvantaged adults. Work Incentive Programs (WIN) offer job training for welfare mothers. Comprehensive Employment Training Programs (CETA Title I funds) are replacing Manpower Programs, but their focus remains skilled training and job placement. However, neither Manpower nor WIN have offered substantive opportunities to adults to rethink their personal and career goals and to choose goals in line with their abilities and interests. The adult who is seeking to continue his/her education, to reenter the labor market or to upgrade his/her work skills needs a kind of counseling that provides information about himself/herself and information about training and occupational opportunities and obstacles.

Purpose

The purpose of the Adult Counseling Project is to design and field test Adult Counseling Centers capable of providing a full range of information relevant to the educational, career, and leisure time planning needs of adults (who are not currently full-time students), in an efficient cost-effective manner, and with the necessary counseling support services. None of the adult educational and career development services currently available in the state of Illinois are prepared to serve such a broad range of adult client needs. Some serve primarily adults from lower educational and economic levels (i.e., WIN, CETA), others primarily adults from middle and upper levels (i.e., college centers). The need to offer a full range of educational and career opportunities to adults at all levels of educational preparation is urgent, given the under-utilization of many adults (i.e., minorities, women) and their need for exposure to opportunities at higher levels than those provided by manpower and work incentive programs.

In other states, recent efforts to serve educational and career planning needs of adults /i.e., Regional Learning Services, Syracuse, New York (Macy, 1974); and Career Counseling Services for Adults, Providence, Rhode Island (Career Education Project, NIE, 1974)/ have been successful in some important respects, particularly in providing counseling support services, but all report a critical need for efficient storage and retrieval of educational and career information, both of a traditional and a non-traditional nature.

The University of Illinois, Champaign-Urbana, because of its leadership in computer systems, was selected as an ideal site for the design and field testing of an Adult Counseling system which would be able to deliver both the necessary counseling support system and an efficient system for storage and retrieval of relevant educational and career information.

An extensive review by INQUIRY project staff of existing computer-assisted counseling systems currently operational (Harris, 1974) indicated that these systems, without exception, are designed for full-time students whose needs and options differ significantly from those of the adult clients the INQUIRY centers are intended to serve. For example, unlike full-time students, adult clients need information about: part-time educational opportunities; obtaining credit for experience gained outside the traditional

classroom; entry and training requirements for occupations open to the older adult; financial aids; and child care.

The counseling procedures built into the existing computer-assisted systems are also poorly suited to the needs of the adult client in that they do not accommodate the differing planning needs of this client. The planning needs of the adult differ from those of the full-time student in relation to the time available for study, financial responsibilities, mobility, family responsibilities, and the obstacles presented by advancing age. In addition, the computer-assisted counseling systems currently operational use a prescriptive model of counseling, which prescribes educational and career choices for the typically young student. The prescriptive model violates the intent of the INQUIRY centers to enhance the autonomy of the adult user rather than as in a prescriptive counseling mode to increase dependence on authority.

Based on the foregoing analysis of the existing computer-assisted counseling systems, it was concluded that an essentially new system design was needed for the computer storage and retrieval of educational and career information relevant to the needs of adult clients, and for the provision of feasible counseling support procedures built into the computer system.

The theoretical basis for the design of the computer-assisted INQUIRY centers is adapted from Tiedeman and O'Hara (1963), wherein services are built around the developmental tasks relevant to the identified educational and career needs of the adult. This framework provides a means of identifying the needs of clients as they enter the system and for directing their attention to particular information files and support services.

Those portions of the counseling support services which cannot cost-feasibly be built into the computer system design will be provided by the INQUIRY center personnel, who will be trained in Guided Inquiry Counseling procedures to assist adult clients in planning to achieve their educational and career goals. A network of linkages with additional counseling support systems in the community will be established for efficient referral when these services are needed.

The purpose of the Adult Counseling Centers will be to enhance the educational, career, and leisure time development of persons whose needs are currently not being met and/or whose potential is under-utilized in society and in the labor market.

Design of Inquiry Centers

There are some things a computer can do more efficiently than a counselor, other things which only a counselor can do (i.e., provide understanding, translate nonverbal cues). First, we will list briefly some of the advantages of the computer for educational and career counseling based on a recent review by Harris (1974), then, we will describe the interaction between counselor, client and computer.

1. The computer can store and retrieve accurately, and quickly more information than a human being. The number of educational course offerings, and programs in the state of Illinois alone would boggle the mind. In addition the number of possible occupations a person might enter reaches into the thousands. A printed copy of any of this information may be given a client for future reference from the computer.

2. The computer can sort through a volume of information and come up with an individually tailored list of educational or occupational choices for the client based on factors the client has introduced (i.e., cost, distance, values, prerequisites, etc.).

3. The computer can interrelate hundreds (or thousands) of pieces of information and provide feedback to the client on whether or not, for example, his interests match the occupation of his choice.

4. The computer can save the counselor time by asking the client all routine questions which can be answered in a multiple choice format. This ability of the computer to conduct a structured interview, lends itself to the inclusion of a variety of inventories on the system (i.e., interests, values, etc.) to facilitate educational and career planning.

These then, are a few of the most obvious advantages of using a computer to assist with the educational and career planning needs of adults. What follows, briefly describes the interaction between counselor, client and computer, highlighting the contribution of the counselor.

The counselor provides at least three services to the client which the computer is unable to provide at this time. These services are critical to the success of counseling because the client would probably not stay in the cneter if (s)he were not welcomed by a human person, helped to understand what the center could do for her/him, and assisted in the use of the computer terminal. (a) Adult clients need a counselor who understands their anxiety about going back to school or changing jobs. (b) They need a counselor who will give them whatever help they need in learning to work with a computer to make it work for them. If an adult has never used a typewriter, he/she may be very uncertain about pressing the computer keyboard. (c) They need a counselor who will help them develop realistic career plans that take into account job trends, family responsibilities, and the potential talents of the individual person.

They need a counselor who will encourage them to obtain non-traditional (i.e., for women, minorities) education when this type of education fits the interests and aptitudes of the person. Further, the client would not benefit optimally from the center if the counselor did not provide the opportunity for the client to explore solutions to the obstacle(s) she/he faces to furthering his/her education or advancing career plans. Many obstacles such as money, home responsibilities, sickness, lack of confidence, lack of skill or lack of aptitude can only be identified and overcome with the help of a human counselor. At this point in time the computer is confined to a structured interview in its conversation with the client and it cannot probe for clues to the client's difficulty, cannot help the client

specify further his goals and obstacles, his plans and his successes and failures (Dawes and Corrigan, 1974). Only a human counselor can assist the client with these critical tasks.

A counselor aide will be available to the client during his or her interaction with the system and will assist at any time needed. The counselor will observe the client's interaction and assume the role of facilitator in the client's growing awareness of his or her potentially active role in learning and in choosing and planning. When the client has made a choice of some sort (to register in a course, to obtain an interview with a registrar, to apply for a job. . .) the counselor will work closely with the client to develop a 'workable' plan and will encourage the client to return to the center to report on progress, if this seems appropriate. Sometimes the client's plan will be to overcome some obstacle (i.e., financial aid, admissions requirements on age, needed academic credit for experience already obtained). The counselor will help the client obtain needed information on his or her rights, procedures to obtain assistance, and may pave the way for the client by putting in a phone call to appropriate persons.

A developmental approach to lifelong learning has particular relevance to the current educational and career planning needs of adults. The developmental theories (Tiedeman and O'Hara, 1963) contribute an understanding of differing career patterns for adults, and of the developmental tasks which may occur at any time in life and are especially relevant to understanding the needs of the minority adult, career changer, and reentry woman. The developmental theories provide a useful diagnostic framework for the adult counseling centers. The Tiedeman and O'Hara (1963) paradigm for lifelong learning has been adapted to the needs of adults, for INQUIRY, pointing to its particular usefulness in determining whether a person is

primarily in an exploratory, crystallizing, planning, or implementation stage. Not only are career changers primarily in the exploratory stage, but also many reentry women, and these clients need to work through related developmental tasks prior to implementing a career plan. Many adults also need encouragement to dream and fantasize before they choose educational experiences; they need to explore several options and to learn more about themselves before implementing any single option.

Guided Inquiry: Structure for Learning Decision-Making and for Making Wise Choices

Using information wisely requires a structure for planning and decision-making. This structure is provided for in the six steps of Guided Inquiry. This six step procedure has been detailed in a manual prepared for counselor training and client self-study planning (Farmer, 1974). Diagram I presents the six Guided Inquiry steps in summary form.

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insert Diagram 1 about here

It is not inappropriate that a counseling method should model a teaching method, since counseling has long been defined as either relearning (i.e., therapy) or new learning (Rogers,1961). Sorenson (1967) first proposed that guided inquiry be used in counseling to help persons solve problmes of living. The phrase 'guided inquiry' was first introduced into learning circles by Jerome Brunner (1966) as a description of an approach to teaching which used a Socratic method of questioning in order to bring out what was inately within the learner, rather than to put in new knowledge. The guided inquiry counseling method is based on a deep regard for the individual learner's ability to solve his own problems and is designed to ensure that the person makes all his own decisions and accepts responsibility for them.

Helping persons solve problems through guided inquiry does not rely on a Socratic questioning technique alone, however. Problem solving and decision-making have become associated with a variety of techniques or models (Jepson & Dilley, 1974) which have much in common. Decision-making is generally conceded to be a sub-set of problem-solving skills, the former being appropriate when a choice between more than one alternative is presented, and the latter, when in addition to alternative choices, there are obstacles to be overcome before a goal can be accomplished (Gagné, 1970; Kelly & Thiebaut 1969). INQUIRY counseling for adults seeking to extend their education or their career, typically involves identification of obstacles, as discussed earlier. Therefore the INQUIRY centers have adopted a problem-solving technique based on Gagné (1970) to teach clients a method for solving their immediate problems and also emerging problems throughout life.

Guided-inquiry counseling, depends on a warm, understanding and accepting relationship, consistant with the facilitative conditions (Rogers, 1975) as an essential precondition for client learning and growth. Rogers (1961) has suggested that when clients 'own' their feelings and problems rather than externalizing them, a teaching role for the counselor is appropriate (see also Authier et al, 1975).

Guided-inquiry problem-solving has six steps which are presented in summary form in Diagram 1. The procedure is the same for each client to the extent that each of the steps is completed. The procedure is different for each client to the extent that each client has different problems and a different content to deal with. The procedure is useful for all types of problems, including personal as well as educational and career planning problems.

Step One. Step one, Clarify Goals, is the step in which the client works with the counselor to determine both his/her long-range and short range educational and career goals. It is important to point out that the long-range goal may be as unspecific as 'choose a satisfying career' or as specific as 'become a nuclear physicist'. The short-range goal should be more specific and is one that the counselor and client can work toward achieving in whatever time they agree to work together. In Joan's case, presented at the beginning of this paper, the short range goal was to find an educational program or a job opportunity which would be more interesting and better paying than her present job, within the next few months.

Step Two. Step two, Identify Obstacles to Subgoal (and needed resources) is the step in which the client and counselor think together about what possible stumbling blocks might prevent goal accomplishment. In addition they list needed resources (i.e., financial, time, grades, references etc.). In Joan's case, given her unwillingness to attend school full time, possible obstacles were training requirements for the type of job she wanted. Another example of an obstacle to a career goal might be the math requirement for someone who wished to become an architect but hated math. A third example might be the need for child-care for a woman wishing to return to school.

Step Three. Step three, Plan Alternative Methods, is the step in which the client and counselor together consider as many possible methods for overcoming obstacles and obtaining the resources identified in step two. The counselor encourages the client, in this step, to consider the experience of others, and his/her own past experience in thinking of methods to use. Sometimes general principles or guidelines are worked out for a client, which are known to work most of the time. For example, Joan adopted the guideline, 'I should never accept an offer of a job which includes careful attention to small details'. In Joan's list of alternative methods she included: (a) check ads in the newspapers and dental and medical publications;(b) send my work resume to agencies who hire persons with my type of training and experience; and (c)check training programs offered in two and four year colleges which might prepare me for work combining advertising with medical technology.

Step Four. Step four, Rank Alternative Methods, is the step in which the client and counselor together try to predict the consequences of using each method; the risks, costs, and benefits involved in each. Guided Inquiry counseling provides the client with a cost/benefit inventory to assist he/she in weighing the pluses and minuses associated with each method. In Joan's case, careful consideration of the benefits and costs associated with each alternative method led her to conclude that all three methods had potential benefits, and that the costs associated with each were relatively small. She therefore decided to try all three methods, rather than any single one.

Step Five. Step five, Tryout Best Method is the step in which the client tries out the method, (or methods in Joan's case) with the most potential benefits and least cost. One of the principles of effective counseling is to provide the learner with feedback on how well he or she is doing (Krumboltz, 1969). The person can collaborate in this effort by providing descriptive information on his or her tryouts and by setting standards of success for him/herself. Joan, for example, might decide that in trying out alternative three she would seek information from the INQUIRY Educational Information System, which she knew was comprehensive for the state of Illinois. In trying out the second alternative, Joan found that the INQUIRY Occupational Information System could provide her with a list of these agencies. The counselor would work with Joan to review information provided by the computer, help her sift it and obtain more information as needed.

Step Six. Step six, Evaluate Goal Progress, is the step in which the counselor and client together review progress toward goal achievement and revise methods currently being used if necessary. In Joan's case this progress review indicated that she had obtained information on a job opening in a pharmacutical firm in a nearby city for an advertizing agent through her efforts responding to ads for employment in the newspaper. Joan arranged for a job interview, was offered the job at a salary attractive to her and she accepted. The alternative of returning to school was dropped in favor of obtaining immediate employment in a role that appealed to her. Joan's goal was achieved, for the present. She was invited to keep in touch with the counselor, however, in the event that the job did not work out as predicted.

Information on educational, occupational and liesure time activities and programs will be provided in INQUIRY Centers in an open system which encourages the client to pursue as much or as little information as the person would like. The information stored in the computer will be in various files depicted in Diagram 2. The four major components of the computer sustem, listed next are described in some detail in what follows:

1. Educational Information System
2. Occupational Information System
3. Self Information System
4. Guidance Information System

insert Diagram 2 about here

Educational Information System (EIS). Section I of Diagram 2 summarizes the types of information in this system. During the development of the project (1974-76), information will be complete as possible for metropolitan Chicago and environs, and Champaign County in Illinois. (1) The Related Areas File will contain information on training requirements for particular programs as well as descriptions of the programs themselves. Training requirements include licensing, apprenticeships, and credentialing, both traditional and non-traditional. This information is cross-referenced to occupational titles and occupational groups or families. (2) The Course/Activities File contains detailed information on single courses, credit and non-credit, offered by traditional (college) and non-traditional settings, (manpower; community agencies; WIN; work-study; apprenticeships; military; proprietary institutions, etc.) in a form easily retrieved by the computer and cross-referenced to occupational titles and occupational groups. (3) The Institutional File contains information on the characteristics of training institutions and agencies offering educational courses and programs.

Occupational Information System (OIS). Section II of Diagram 2 summarizes the type of information in this system. Local information on occupations during the development of the project (1974-76) will be current for metropolitan Chicago and Champaign County in Illinois. (1) INFO will contain information on at least 800 of the most common occupations, valid for local, regional, state, and national purposes including information on employment trends, work requirements, expected salary range at entry and after some experience; and where to obtain further information. All of these descriptions are cross-referenced to the educational and training opportunities described in EIS. (2) XROE provides the user with a means of selecting a small sub-set of occupational descriptions, from the 800 in the file.

Self Information System (SIS). Section III of Diagram 2 summarizes the type of information that a client may obtain in this system. This system is designed to provide the user with information about his/her interests, values, general intelligence, and competencies as these relate to furthering his/her education or career development. (1) XOAIS is a questionnaire to obtain the client's self-estimates of his strengths and weaknesses. (2) SDS is the Self-Directed Search (Holland, 1973) to provide the client with a measure of his or her interests and competencies and to relate these to educational and career opportunities. (3) SWV is is Super's Work Values Inventory (Super, 1970) to obtain a measure of the client's work related values. (4) BOW is Borgotta's Quick Word Test (Borgotta and Corsini, 1964) to provide the client with a measure of general intelligence. (5) VITA FILE is a file for storing information on the client obtained from the inventories in SIS and obtained at entry into the counseling system. This file will also contain a summary of the information obtained by the client in other parts of the system (i.e., educational courses or occupational descriptions).

Guided Inquiry System (GIS). Section IV of Diagram 2 summarizes the types of counseling services and system helps contained here. GIS is designed to assist the client to use the educational self and occupational information provided in a manner which both aides him/her in decision-making and planning, and increases his/her awareness of how he or she plans, with the ultimate goal of improving his planning strategies and his or her sense of personal autonomy. (1) SIGNON is the point of entry of the client to the system. During SIGN-ON, biographical information will be obtained from the client, while he/she at the same time is oriented to the use of the equipment. Client data will be stored in the VITA File (see description of

SIS), coded by name or pseudonym, at the client's preference. In SIGNON, too, the client will also receive a summary of center services and a description of the educational and career development philosophy of the center. (2) HELP provides the client with answers to questions about system operation (i.e., why a particular course is not on a list) and prompts the client to give acceptable responses to questions (i.e., if two responses are requested and the client gives only one). (3) SUMMARY will provide the client with a review of the portions of the systems services used at timely intervals during the client's interaction. At the same time, SUMMARY will suggest other services, and/or information that the client might pursue and consistencies and inconsistencies in the information (i.e., about self and educational programs). (4) CRYSTALLIZE will assist the client in comparing and valuing alternative educational and career choices. (5) PLAN will assist the client in identifying obstacles to his choice (i.e., need for financial aid, child care, transfer of credit, etc.) and in planning to overcome these obstacles in order to achieve his/her educational or career development goal. The counselor will be actively assisting the client during PLAN. The client will exit from PLAN with a plan, a first step toward his/her goal. (6) AIDS will provide information to assist the client in overcoming obstacles (i.e., child care; financial aid; CLEP exams; legal aid, etc.).

A second case is presented here to illustrate the path of a client through an INQUIRY Center.

Dave is 19. He finished high school last year but refuses to look for work. He has no money saved for any further education or training and his family are putting pressure on him to return to work. Dave is black and has one sister in college. His other three brothers all work in Blue Collar jobs. When Dave came to the Adult Counseling center he was living with his sister and her husband. They encouraged him to come to the center and get help!

Dave provided the following information about himself during his initial talk with the counselor at the center as they worked together to complete the questions in SIGNON relating to his work and educational history. It appears Dave would prefer to travel around the country on his motorcycle for a couple of years, but he doesn't have the money to do it. He is also interested in playing ice hockey but feels he lacks the competence needed to play professionally. His interests in high school included sketching and he has considered a career in commercial art. However, he has taken no steps to check into art training programs and totally rejects the idea of going to college. He is defensive when offered suggestions or assistance regarding his career training. Dave's high school grades and ACT scores were in the average range. His only work experience has been factory work loading trucks.

The counselor and Dave first discussed his ideal career; "What would you be doing five years from now if you could do anything you wanted to do . . . no holes barred?" Dave answered, "Be a commercial artist".

At this point Dave choose to enter the Educational Information System (EIS) to obtain more information on training requirements for commercial artists. He was provided with training information which indicated that training was available in several settings. He could obtain on-the-job training with some Illinois State Industries; he could attend a school devoted entirely to training of commercial artists; or he could attend a community college or four-year college. Dave's primary obstacles to obtaining training were: (a) motivation to work, and (b)lack of finances. However, Dave did not have any family responsibilities and financial assistance for a talented black student was potentially available in some of the training programs. The counselor helped Dave obtain a list of training programs where he might expect some financial assistance. Dave's lack of motivation, it turned out, was partly a result of his parents lack of support for his interests in a career in commercial art. His move to live with his sister was a step in the direction of resolving this difficulty.

Dave was asked if he would like further information about commercial artists, for example, job trends, their personal attributes, and job requriements (from the OIS service in the center). Dave said, no. He was confident that his high school art teachers would recommend him. His teachers reinforcement throughout high school for his artistic endeavors had given Dave great confidence in his ability to succeed in this field (in contrast to his opinion of his ability in professional hockey). The counselor accepted Dave's judgment of his abilities and together they entered PLAN to figure out how to overcome financial need and obtain entrance in a desirable training program.

Dave agreed, as a first planning step, to send a letter to three commercial art training programs and request detailed information about financial aid available. Dave left the center indicating he would return with the information when it arrived and discuss next steps with the counselor. He returned in three weeks with information from two of the three programs. Both appeared to meet Dave's interest and needs and he agreed to send for application blanks. He returned in six weeks with completed application blanks and checked out what he had written with the counselor. He mailed the applications that day. He phoned the counselor at the end of the month to say that he had been invited to an interview at one institution and that he was going that afternoon. He phoned later that day, with excitement in his voice. He had been accepted in a two year commercial art training program with financial support sufficient to cover living expenses. The institution was less than eight miles from his sister's home.

Dave represents but one, of several possible uses of the INQUIRY Centers for adults. As the centers become operational in Illinois, further reports are planned describing their effectiveness in meeting the needs of non-traditional students.

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Diagram I

STEPS IN

GUIDED INQUIRY EDUCATIONAL AND CAREER COUNSELING

1 CLARIFY GOALS

Long-range Goal: _____

_____

Sub-Goal: _____

Tasks:

a. _____ c. _____

b. _____ z. _____

2 IDENTIFY OBSTACLES TO SUBGOAL

a. _____

b. _____

First Task:

Outcome: _____

Standard: _____

Condition: _____

3 PLAN ALTERNATIVE METHODS

Alternatives to overcome obstacles and accomplish first task:

a. _____

b. _____

c. _____

d. _____

Rule/Principle _____

4 RANK ALTERNATIVE METHODS

First _____

Second _____

Third _____

Fourth _____

Fifth _____

5 TRYOUT BEST METHOD

I will be successful when...

_____

_____

_____

_____

6 EVALUATE GOAL PROGRESS

First week: _____

Second week: _____

Third week: _____

Task achieved; ready to recycle to Step 1, week of _____.

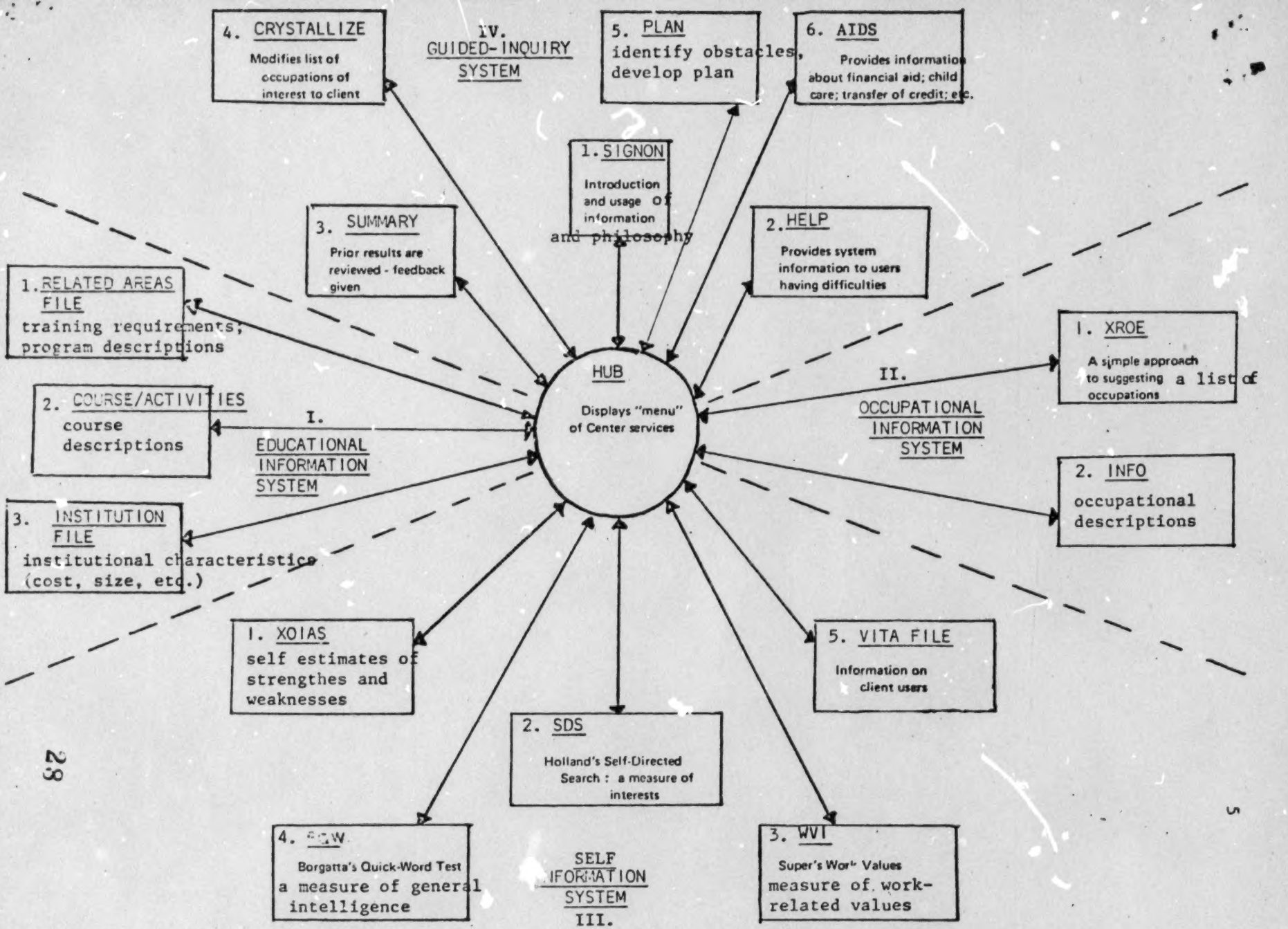

DIAGRAM 2. System Modules (Exc. PLAN)